



5x Reduction i-line Stepper

# NSR-2205iL1

Supports a Variety of Semiconductor Devices  
Ideal to Supplement or Replace Existing Steppers



# Supports a Variety of Devices such as Power and Communications Semiconductors and MEMS

## NSR-2205iL1 5x Reduction i-line Stepper

The NSR-2205iL1 is an i-line stepper that will be utilized to manufacture a wide range of devices. It provides excellent affordability and will enable optimized production of various semiconductor devices regardless of the wafer material. It is fully compatible with existing Nikon i-line lithography systems and can be used to supplement or replace existing steppers that no longer meet manufacturing requirements.

### Performance

Resolution	$\leq 350 \text{ nm}^{*1}$
NA	0.45
Exposure light source	i-line (365 nm wavelength)
Reduction ratio	1:5
Maximum exposure field	22 mm × 22 mm
Overlay	SMO <sup>*2</sup> : $\leq 70 \text{ nm}^{*1}$

\*1 When option is applied

\*2 Single Machine Overlay: machine-to-self overlay accuracy

### Key Features

#### • Provides Excellent Affordability While Supporting a Variety of Needs

The NSR-2205iL1 will deliver high productivity while optimizing yield level for a variety of semiconductor manufacturing processes through high-accuracy wafer measurement using multipoint autofocus (AF), advanced wafer stage leveling, and wide DOF (expanded depth of focus range), among other benefits. In addition, it is well-suited for a variety of applications due to its wafer thickness and size compatibility, high wafer warpage tolerance, and flexible capabilities including but not limited to supporting SiC (silicon carbide) and GaN (gallium nitride) processing. The NSR-2205iL1 i-line stepper will deliver excellent affordability while satisfying chipmakers' diverse requirements.

#### • Compatible with Existing Products and Fab Operations

Customers having Nikon i-line exposure systems in their fab can continue to utilize assets and operations already in place such as photomasks and wafer exposure recipes. The 2205iL1 can also readily supplement or replace existing steppers that no longer meet manufacturing requirements.

#### • Designed for Long-term Use and Sustainability

The NSR-2205iL1 can be used with confidence over an extended period of time because its design utilizes general-purpose commercially available components, making it easier than ever to procure parts and providing a more sustainable lithography solution for the future.

CLASS 1 LASER PRODUCT



#### WARNING

TO ENSURE CORRECT USAGE, READ MANUALS CAREFULLY BEFORE USING YOUR EQUIPMENT.

The export of this product is controlled by Japanese Foreign Exchange and Foreign Trade Law and International export control regime. It shall not be exported without authorization from the appropriate governmental authorities.

Performance and equipment are subject to change without any notice or obligation on the part of the manufacturer. Products and brand names are trademarks or registered trademarks of their respective companies. August 2023

©2023 NIKON CORPORATION

#### Nikon Corporation Precision Equipment Group Marketing Department

Shinagawa Intercity Tower C, 2-15-3, Konan, Minato-ku, Tokyo 108-6290, Japan  
Tel: +81-3-6433-3639

#### Nikon Precision Inc.

1399 Shoreway Road, Belmont, CA 94002-4107, U.S.A.  
Tel: +1-(650)-508-4674

#### Nikon Precision Europe GmbH

Robert-Bosch-Strasse 11, D-63225 Langen, Germany  
Tel: +49-6103-973-0

#### Nikon Precision Korea Ltd.

2, Singal-ro 124beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, 16968 Korea  
Tel: +82-31-288-5601

#### Nikon Precision Taiwan Ltd.

3F-1, NO.28, Taiyuan Street, Zhubei City, Hsinchu County 302, Taiwan, R.O.C.  
Tel: +886-3-552-5888

#### Nikon Singapore Pte. Ltd.

18 Tai Seng Street #04-08, 18 Tai Seng, Singapore 539775  
Tel: +65-6559-3618

#### Nikon Precision (Shanghai) Co., Ltd.

11-12F, Tower 5, Crystal Plaza No. 36, Ping Jia Qiao Road, Pudong New District, Shanghai 200126, China  
Tel: +86-21-5899-0266

<https://www.nikon.com/business/semi/>